

10/522555

DTG Rec'd PCT/PTO 27 JAN 2005

Customer No. 22,852  
Attorney Docket No.: 05788.0340

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

**Attilio BRAGHERI et al.**

Application No.: **Not Yet Assigned**

Filed: **January 27, 2005**

National Stage of International Application No.  
**PCT/EP2002/008526** under 35 U.S.C. 371, for  
**MULTI-STAGE RAMAN AMPLIFIER**

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)  
) Group Art Unit: **Not Yet Assigned**

)  
) Examiner: **Not Yet Assigned**  
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)

**MAIL STOP PCT**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§1.56 and 1.97(b), applicants bring to the Examiner's attention the documents listed on attached Form PTO-SB-08 and cited in the international search report. With exception of the U.S. publication, copies of the listed documents are attached. Applicants respectfully request that the Examiner consider the documents listed on attached Form PTO-SB-08 and indicate that they were considered by making an appropriate notation on this form. This Information Disclosure Statement is being filed with the above-referenced application.

Also enclosed is an English-language international search report from the European Patent Office in the PCT international application, from which this national phase U.S. application is derived.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: January 27, 2005

By: 

Ernest F. Chapman  
Reg. No. 25,961

Enclosures  
EFC/FPD/sci

10/522555

IDS Form PTO/SB/08: Substitute for PTO 49A/PTO				Docket No. <b>10/522555</b> Filed <b>27 JAN 2005</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)				Application Number	Not Yet Assigned
				Filing Date	January 27, 2005
				First Named Inventor	Attilio BRAGHERI et al.
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	05788.0340

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials	Cite No. <sup>1</sup>	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-2002/0044335 A1	04-18-2002	ISLAM et al.	
		US-			

**Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004**

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 02/058198 A2/A3	07-25-2002	ISLAM et al.		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation <sup>6</sup>
		KOBAYASHI, K., "Fiber Raman Amplifier and Fiber Raman Laser", Patent Abstracts of Japan, JP. No. 200109026, April 20, 2001	
		KRUMMRICH, P. M. et al., "Bandwidth Limitations of Broadband Distributed Raman Fiber Amplifiers for WDM Systems", OFC 2001, Optical Fiber Communication Conference and Exhibit. Technical Digest Post Conference Edition (IEEE CAT. 01CH37171, OFC 2001. Optical Fiber Communication Conference and Exhibition. Technical Digest, Anaheim, CA, USA, Vol. 1, pp. MI3/1-3, (March 17-22, 2001).	
		FLUDGER, C. R. S., et al., "Fundamental Noise Limits in Broadband Raman Amplifiers", OFC 2001, Optical Fiber Communication Conference and Exhibit. Technical Digest Post Conference Edition (IEEE CAT. 01CH37171, OFC 2001. Optical Fiber Communication Conference and Exhibition. Technical Digest, Anaheim, CA, USA, Vol. 1, pp. MA5/1-3, (March 17-22, 2001).	
		KIDORF, H. et al., "Pump Interactions in a 100-nm Bandwidth Raman Amplifier", IEEE Photonics Technology Letters, Vol. 11, No. 5, pp. 530-532, (May 1999).	
		ZHOU, X. et al., "A Simplified Model and Optimal Design of a Multiwavelength Backward-Pumped Fiber Raman Amplifier", IEEE Photonics Technology Letters, Vol. 13, No. 9, pp. 945-947, (September 2001).	
		KADO, S. et al., "Broadband Flat-Noise Raman Amplifier Using Low-Noise Bi-Directionally Pumping Sources", ECOC 2001, 2 Sheets, (2001).	

Examiner Signature		Date Considered	
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**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.